

REMARKS

This amendment is responsive to the Office Action dated April 10, 2007. Claims 1-31 are pending. Applicant traverses all rejections of claims in this application, and requests reconsideration in view of the arguments below.

§ 102 Rejections of the Claims

Claims 1-3, 7-8, 15-19, 21, 24, and 27-31 have been rejected under 35 U.S.C. § 102 as being anticipated by Kramer, U.S. Patent No. 5,405,362.

Claim 1 requires automatically determining a magnitude at which to supply the pacing stimuli, based, at least in part, upon the physical parameters of the patient. Claims 24 and 30 require a controller configured to determine a magnitude of pacing stimuli based at least in part on a patient physical parameter. Claim 31 requires automatically determining a magnitude at which to supply pacing stimuli based, at least in part, on whether a defibrillation shock had previously been provided to the patient. These requirements are not found in Kramer.

Kramer does not teach a determination of pacing stimuli magnitude based on sensed patient physical parameters or based on whether the device previously supplied a defibrillation pulse to the patient. The Examiner has pointed to a passage at col. 14, lines 13-23 of Kramer that mentions “predetermined selectable quantities” and “instructions from the CPU.” However, this passage does not teach an automatic determination of magnitude of pacing stimuli based on a physical parameter or a controller configured to do this. Other portions of Kramer imply that magnitude is chosen by the user. For example, Fig. 17 of Kramer shows an energy selection dial 243. At col. 14, lines 30-35, Kramer describes Fig. 17 as showing “a multiplicity of control devices 243 operable to select the *magnitude* and duration of electrical energy discharged by the electrical source” [emphasis added]. Also, at col. 12, lines 40-48, Kramer describes an algorithm for treatment of bradycardia saying that “the operator would input data into the CPU using data input terminal 238 of Fig. 15. The expert

system would then use this data to proceed with the algorithm, as shown in blocks 820-850.” This includes block 840, where pacing is shown.

Based on these figures and excerpts from Kramer, it appears that Kramer is teaching that the magnitude of pacing pulses be determined based on a user input, either through the dial 245 of Fig. 17 or through the data input terminal 238 of Fig. 15, and is not determined automatically based on a physical parameter or on whether a defibrillation shock had been provided.

With respect to the Examiner’s remarks on claims 7-8, Fig. 18B of Kramer teaches that the device prompts “shock delivered” when a defibrillation shock is delivered. This is not a teaching of a step of obtaining and analyzing physical parameters includes determining whether a defibrillation shock was delivered within a predetermined time, as required by claim 7.

With respect to the Examiner’s remarks on claims 15-19 and 21, Applicant takes issue with the Examiner’s assertion that “CPR includes oxygen therapy”. At paragraph 0025, line 10 of the specification, this patent application lists several therapies, including “oxygen therapy, drug therapy, or CPR therapy...” This is a clear indication that the term “oxygen therapy” is used in this application to mean something distinct from CPR therapy. CPR is not generally understood to include administration of oxygen therapy. This is evident when one considers that CPR is often administered by laypersons in the absence of medical equipment, i.e., where no source of supplemental oxygen is available. Copies of an American Lung Association “Oxygen Therapy Fact Sheet”¹ and a product brochure for Oxygen Therapy Kits² are attached in support of the position that oxygen therapy is delivered with oxygen therapy equipment and therefore a teaching of CPR alone is not a teaching of oxygen therapy. If the examiner maintains the position that “CPR includes oxygen therapy”, Applicant requests that a reference supporting this assertion be provided.

¹ *Oxygen Therapy Fact Sheet* dated November 2004, from the American Lung Association website, at this url: www.lungusa.org/site/pp.asp?c=dv1UK9O0E&b=35697

For at least the reasons discussed above, claims 1-3, 7-8, 15-19, 21, 24, and 27-31 are not anticipated by Kramer.

§ 103 Rejections of the Claims

Claim 6 has been rejected under 35 U.S.C. § 103 as unpatentable over Kramer in view of Kroll, U.S. Patent No. 6,167,306. The above arguments concerning Kramer are applicable here as well. Kroll does not have any teachings which makes up for what is lacking in Kramer. Kroll does not include any teaching of determining a magnitude for pacing stimuli. For at least these reasons, claim 6 is patentable over Kramer in view of Kroll.

Claims 4-5, 8-17, 20, 23, and 25-26 have been rejected under 35 U.S.C. § 103 as unpatentable over Kramer in view of the Snyder patent. Although the Office Action identifies the Snyder patent with the number 6,304,773, it appears from the specific passages and figures discussed by the Examiner that U.S. Patent 6,356,785 to Snyder is what the examiner intended and that the number 6,304,773 was included in the Office Action text in error.

The arguments above concerning the Kramer reference are applicable here as well. Snyder does not include any teachings that make up for what is lacking in Kramer. Snyder does not teach any determination of a magnitude of a pacing stimulus. Snyder's teachings are directed generally to the prompting of a rescuer to intervene or take certain actions. Snyder's only teaching relating to transcutaneous pacing is the provision of a prompt to a user to consider pacing.

In response to the Examiner's remarks on claims 8- 9, 20 and 25, Snyder does not teach any adjustment of pacing stimuli based on updated parameters, including blood oxygen levels. Claim 9 requires the adjusting of the magnitude and pacing rate, based in part on updated parameters. Snyder does not teach any such adjustment. As pointed out above, the only mention of pacing in Snyder is in the context of

² Oxygen Therapy Kit product brochure (document 15PL7020 Rev. 2 05/04) by O-Two Medical Technologies Inc. of Mississauga, Ontario, Canada

prompting a user to consider pacing (see col. 21, lines 22-23). Neither Figure 15, nor Figures 16B or 17B of Snyder make any reference to pacing.

In response to the Examiner's remarks regarding claims 10 and 26, and 11-14, claim 10 has been amended to add the word "automatically" to describe the terminating of discharge of energy. In claim 26, the controller is configured to terminate the discharge of the energy device. Neither Snyder nor Kramer teaches automatically terminating pacing therapy or a device with a controller that will terminate pacing therapy based on an updated patient parameter.

Snyder does not explicitly teach terminating a therapy based on updated physical parameters. Snyder only teaches providing a particular prompt to a user if normal cardiac function is detected.

For at least the reasons discussed above, claims 4-5, 8-17, 20, 23, and 25-26 are patentable over Kramer in view of Snyder.

Claim 22 has been rejected under 35 U.S.C. § 103 as unpatentable over Kramer in view of Snyder and further in view of Sherman, U.S. Patent Application Publication No. 2001/0018562.

The arguments made above concerning Kramer and Snyder are applicable here as well. Sherman does not contain any teaching that makes up for what is lacking in Kramer and Snyder. Sherman does not teach any determination of a magnitude of a pacing stimulus, as required by claim 22. For at least this reason, claim 22 is patentable over Kramer in view of Snyder and further in view of Sherman.

For at least the reasons discussed above, the Examiner has failed to establish anticipation or prima facie obviousness of the claimed subject matter.

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Applicant believes that no additional fees are needed for processing of this Amendment. However, if any fees are due, please charge any such fees or credit any

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overpayment to deposit account number 13-2546. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Respectfully submitted,

Date: Oct. 8, 2007 
Mary Yawney Redman
Registration No. 29,881

MEDTRONIC, INC.
710 Medtronic Parkway NE, M.S.: LC340
Minneapolis, Minnesota 55432-5604

Telephone: 425-867-4465
Facsimile: 425-867-4142

CUSTOMER NO. 53049

Attachments: A. Oxygen Therapy Fact Sheet, American Lung Association
 B. Oxygen Therapy Kits product brochure by O-two Medical Technologies Inc.